

REMARKS

The Final Office action of July 21, 2004 has been received and its contents carefully noted.

Claims 18-25, and 27-36 are pending in the application. Claim 26 has been canceled. Claims 18, 30, and 35-36 have been amended. Support for these amendments, for example, may be found in FIG. 3 and on page 10, lines 2-25 of the specification. The figure and pages fully describe the recited counter operation at the Master Station as related to the rate of assigning minimum bandwidth to pending requests received from at least one peripheral station.

Claims 18-27, 30-31, and 35-36 stand rejected under § 103(a) as being unpatentable over Ghaibeh et al. ("Ghaibeh") (U.S. Patent No. 5,978,374) in view of Tajima et al. ("Tajima") (Asymmetric ATM-PON interface compliant to ITU-T/FSAN Standard for global optical access system). Claims 28-29, and 32-34 stand rejected under § 103(a) as being unpatentable over Ghaibeh and Tajima. Applicants respectfully traverse these rejections, and request allowance thereof in the continuation prosecution application for the following reasons.

Substance of Examiner Interview

Applicant acknowledges with appreciation the courtesy extended to Applicants' representative by the Examiner during the interview conducted on August 12, 2004.

Applicants' representative and Examiner discussed the allowability of the Claim 18 in view of the cited prior art, Ghaibeh. The examiner maintained the rejection of the last office action mailed July 21, 2004. In response to the maintained rejection, representative agreed to amend Claim 18 to distinguish the cited art where Examiner agreed clarifying dependent claim feature of the rate of assigning minimum bandwidth to requesting peripheral stations may distinguish the cited art upon further review and consideration by the Examiner. Examiner agreed to consider amendment and suggested filing of request for continued examination (RCE) to ensure entry of the amendment. Representative agreed to consider Examiner's suggestion for filing of amendment.

The Present Claims are Patentable Over the Cited References

Claims 18-27, 30-31, and 35-36 are not made obvious by Ghaibeh and Tajima

Claims 18-27, 30-31, and 35-36 were rejected under § 103(a) in view of Ghaibeh and Tajima. Ghaibeh and Tajima, either alone or in combination, fail to disclose the features recited in these claims as amended such as receiving instantaneous bandwidth requirement information, by including requests for dynamic bandwidth allocation that are piggy-backed in upstream traffic slots along with user traffic, and the first additional modality including assigning guaranteed bandwidth only to portion of receiving stations sending

a request indicating non-empty queues which generates a pending request, and assigning at a rate requested by at least one receiving station that is limited by a maximum amount and being determined between the master station and the at least one peripheral station during an ATM connection setup phase, wherein the requested rate corresponding to a starting value of a counter being decremented, at each upstream slot time, at the Master Station with the pending request being served upon expiration of the counter.

In contrast to the recited features, Ghaibeh discloses a point-to-multipoint system that uses a counter at the network unit (rather than at the master station as recited) to monitor service queues and track the number of pending ATM cells awaiting upstream transport in network unit queues. (see FIG. 10A; col. 9, lines 59-65). Ghaibeh expressly states that "...when responding to an ATM permit 130, respective counters (not shown) in a queue size monitor 230 monitor the CBR, ABR and VBR service queues 214, 216 and 218, tracking the number of pending ATM cells awaiting upstream transport in each respective queue...the counters provide an updated cell count to a request slot assembler 231 for each respective service type queue." (see FIG. 10A; col. 9, lines 59-65).

There is a significant distinction between tracking/monitoring pending cells awaiting upstream transport at the receiving station as disclosed by Ghaibeh, and the recited feature of a counter being decremented, at each upstream slot time, at the Master Station with

the pending request being served upon expiration of the counter. Ghaibeh monitors the services queues at the receiving station in contrast to decrementing the counter at the master station as recited.

Similarly, Tajima makes no mention of the recited feature of the first additional modality including a counter being decremented, at each upstream slot time, at the Master Station with the pending request being served upon expiration of the counter. Tajima solely discloses a shared-basis dynamic allocation scheme (see FIG. 4, page 28) with no mention of assigning guaranteed bandwidth only to portion of receiving stations sending a request indicating non-empty queues, generating a pending request, and with a rate corresponding to a starting value of a counter being decremented, at each upstream slot time, at the master station with the pending request being served upon expiration of the counter.

Ghaibeh and Tajima, either alone or in combination, fail to disclose the recited feature of the first additional modality including assigning guaranteed bandwidth only to portion of receiving stations sending a request indicating non-empty queues which generates a pending request, and assigning at a rate requested by at least one receiving station that is limited by a maximum amount and being determined between the master station and the at least one peripheral station during an ATM connection setup phase, and wherein the requested rate corresponding to a starting value of a counter being decremented, at each upstream slot time,

at the Master Station with the pending request being served upon expiration of the counter making the claimed invention patentably distinct and non-obvious from the cited references.

Claims 28-29, and 32-34 are not made obvious by Ghaibeh and Tajima

Claims 28-29, and 32-34 were rejected under § 103(a) in view of Ghaibeh and Tajima. Applicants strongly contend that Ghaibeh and Tajima, either alone or in combination, fail to disclose the features recited in these claims as amended such as receiving instantaneous bandwidth requirement information, by including requests for dynamic bandwidth allocation that are piggy-backed in upstream traffic slots along with user traffic, and assigning guaranteed bandwidth only to portion of receiving stations sending a request indicating non-empty queues which generates a pending request, and assigning at a rate corresponding to a starting value of a counter being decremented, at each upstream slot time, at the master station with the pending request being served upon expiration of the counter.

As contended above, Ghaibeh clearly does not disclose this patentably distinct feature as in direct contrast to the recited feature, Ghaibeh solely discloses monitoring services queues and pending ATM cell upstream transport using counters at the receiving station (NU MAC 38). Further, Tajima solely discloses a shared-use dynamic bandwidth allocation scheme with no mention of assigning guaranteed bandwidth using a counter being decremented, at each

upstream slot time, at the master station with the pending request being served upon expiration of the counter.

Ghaibeh and Tajima, either alone or in combination, do not disclose the recited feature making the claimed invention patentably distinct and non-obvious from the cited references.

Conclusion

In view of the amendments and remarks submitted above, it is respectfully submitted that all of the remaining claims are allowable and a Notice of Allowance is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at telephone number (703) 205-8000, which is located in the Washington, DC area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayments to Deposit Account No. 02-2448 for any additional fees


required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of
time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH, & BIRCH, LLP

C.D.

By



Michael K. Mutter, Reg.#29,680
P.O. Box 747
Falls Church, VA 22040-0747
Phone: (703) 205-8000

MKM/CAG/mlr/lab
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